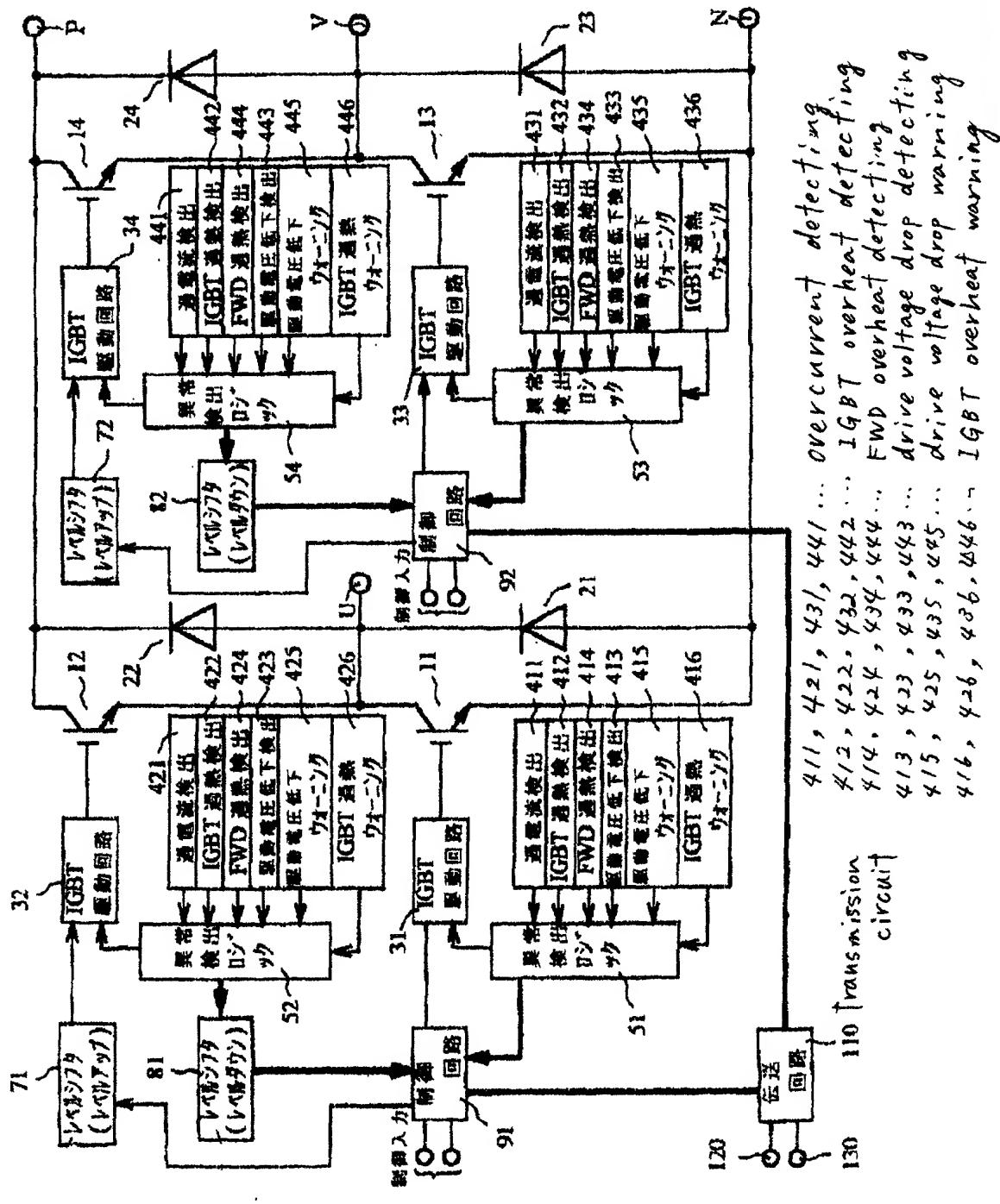


- 31 ~ 34 ... IGBT drive circuit
 51 ~ 54 ... abnormal condition detecting logic
 71, 72 ... level shifter (level up)
 81, 82 ... level shifter (level down)
 91, 92 ... control circuit

図 1
Fig. 1



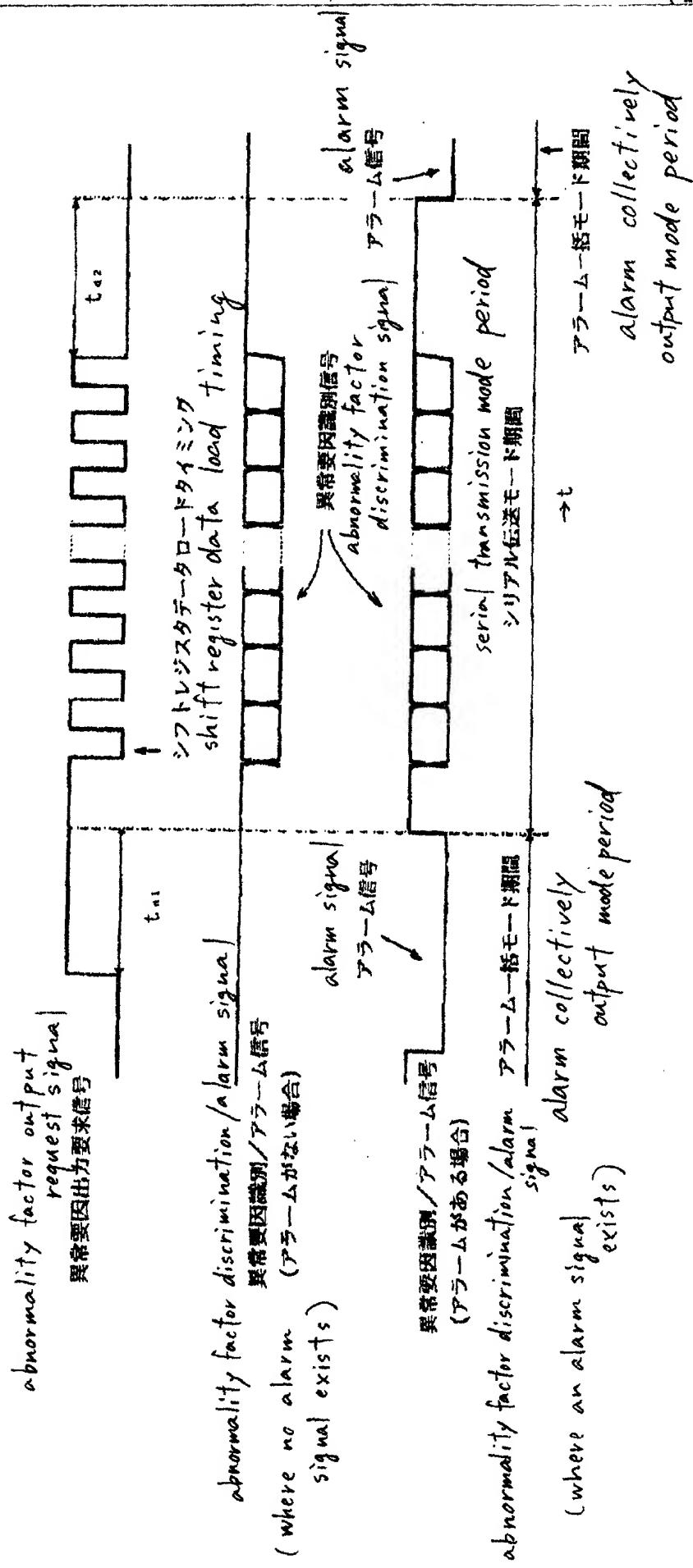
(1)

411, 421, 431, 441 ... overcurrent detecting
 412, 422, 432, 442 ... IGBT overheat detecting
 413, 423, 433, 443 ... FWD overheat detecting
 414, 424, 434, 444 ... drive voltage drop detecting
 415, 425, 435, 445 ... drive voltage drop warning
 416, 426, 436, 446 ... IGBT overheat warning

110 transmission circuit

【図2】

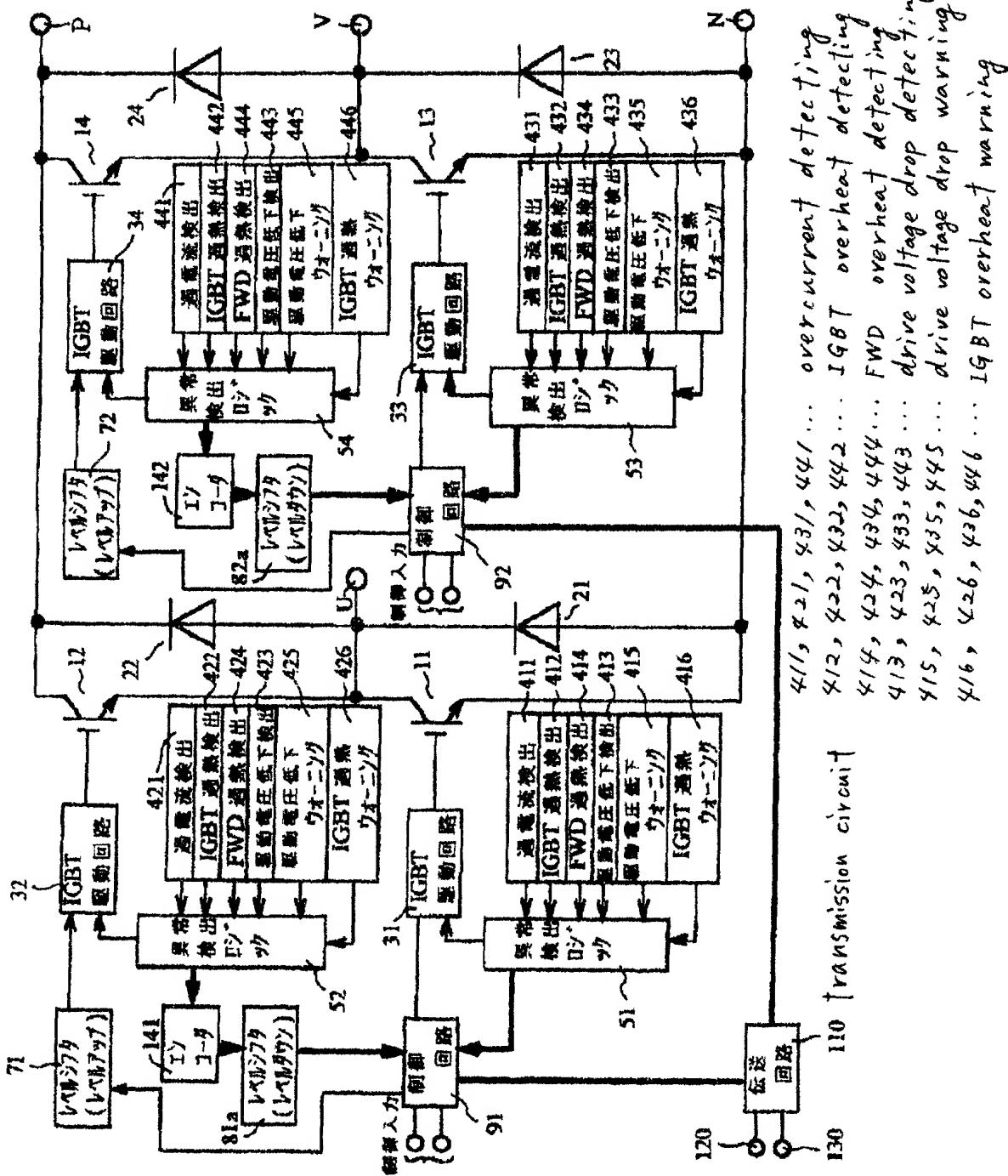
Fig. 2



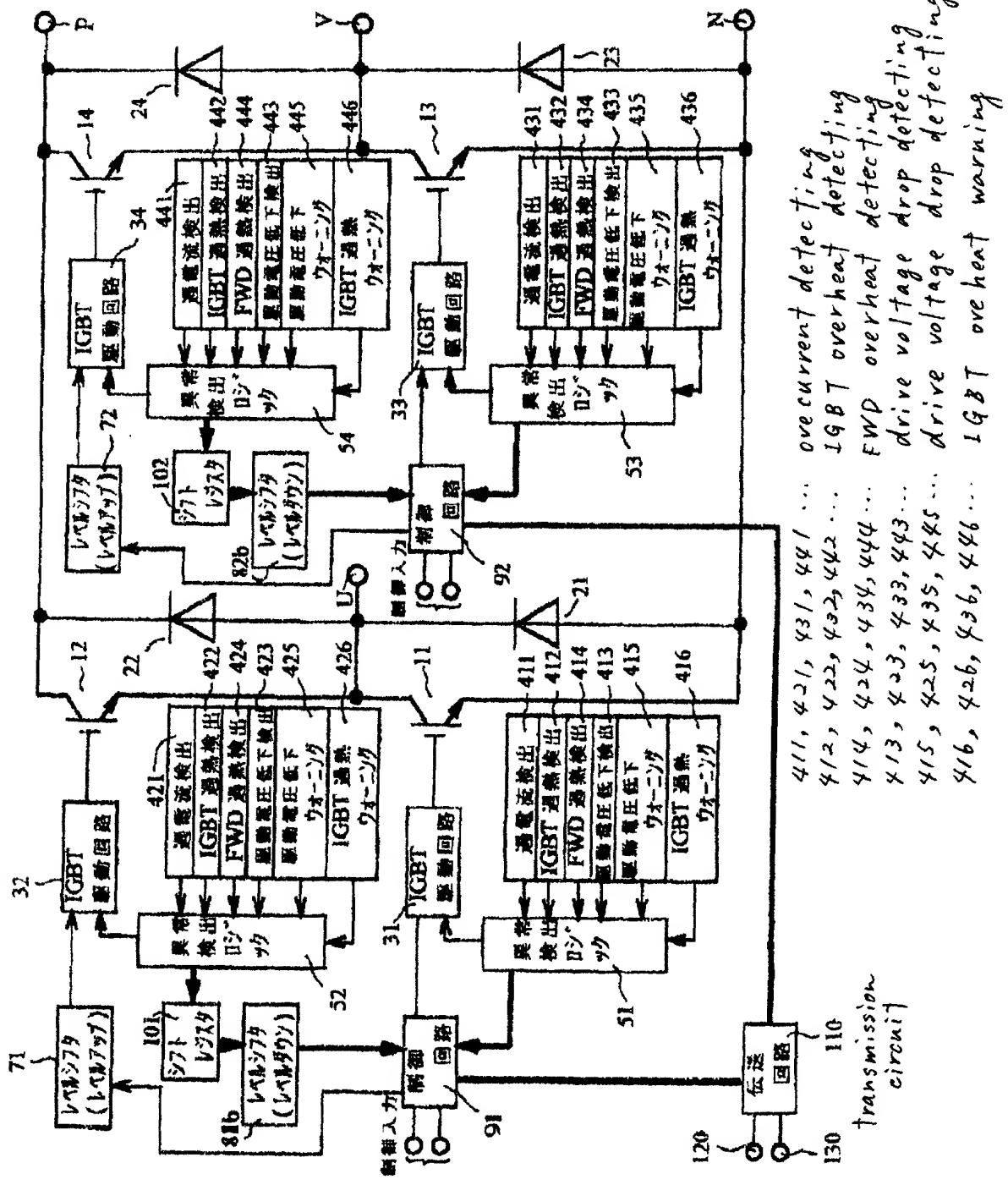
【図3】

Fig. 3

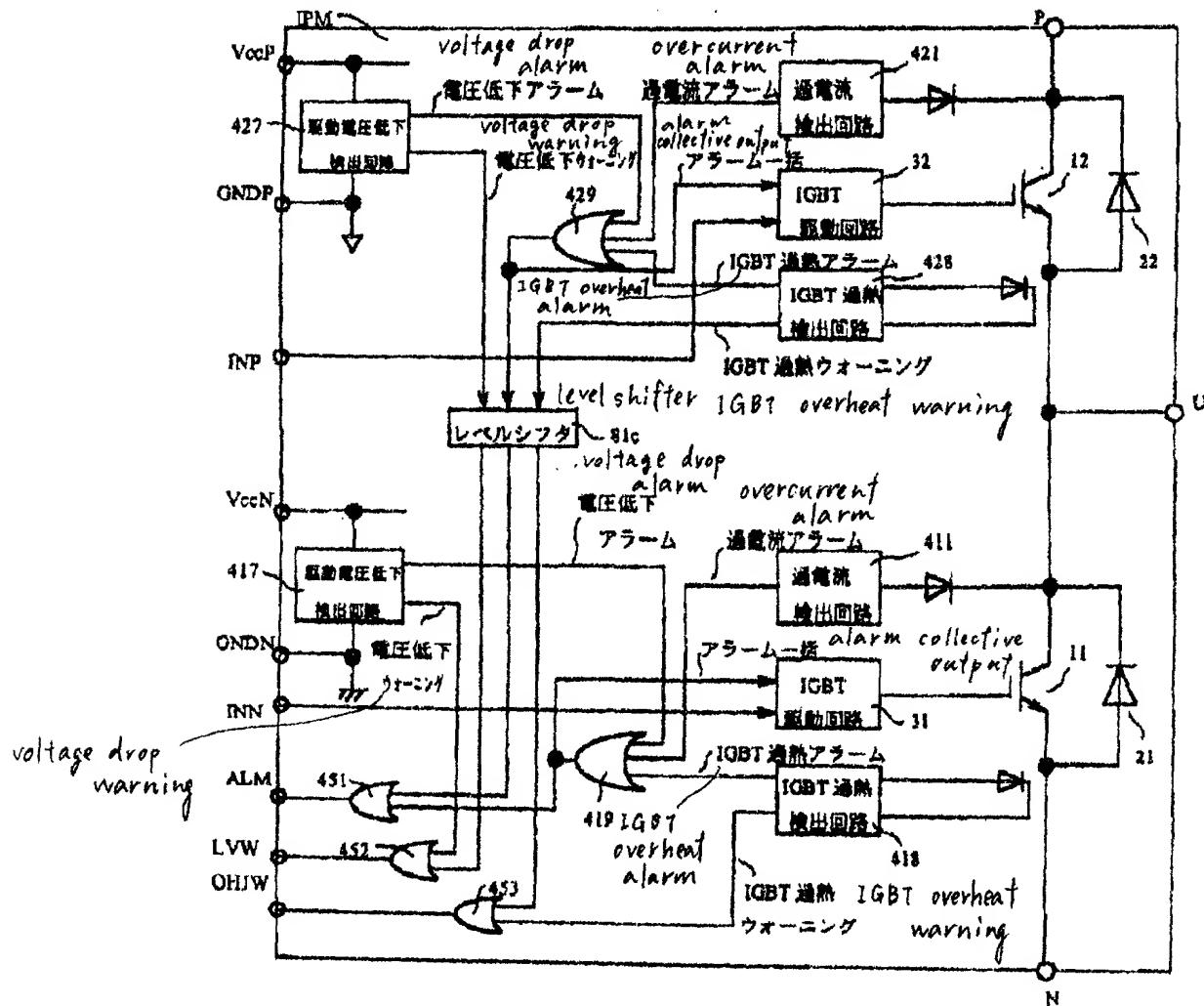
- 31, 34 ... IGBT drive circuit
 51, 54 ... abnormal condition detecting logic
 71, 72 ... level shifter (level up)
 81a, 82a ... level shifter (level down)
 91, 92 ... control circuit
 141, 142 ... encoder



411, 421, 431, 441, ... overcurrent detecting
 412, 422, 432, 442 ... IGBT overheating detecting
 414, 424, 434, 444 ... FWD overheating detecting
 413, 423, 433, 443 ... drive voltage drop detecting
 415, 425, 435, 445 ... drive voltage drop warning
 416, 426, 436, 446 ... IGBT overheating warning

図 4
Fig. 4

【図5】 Fig. 5



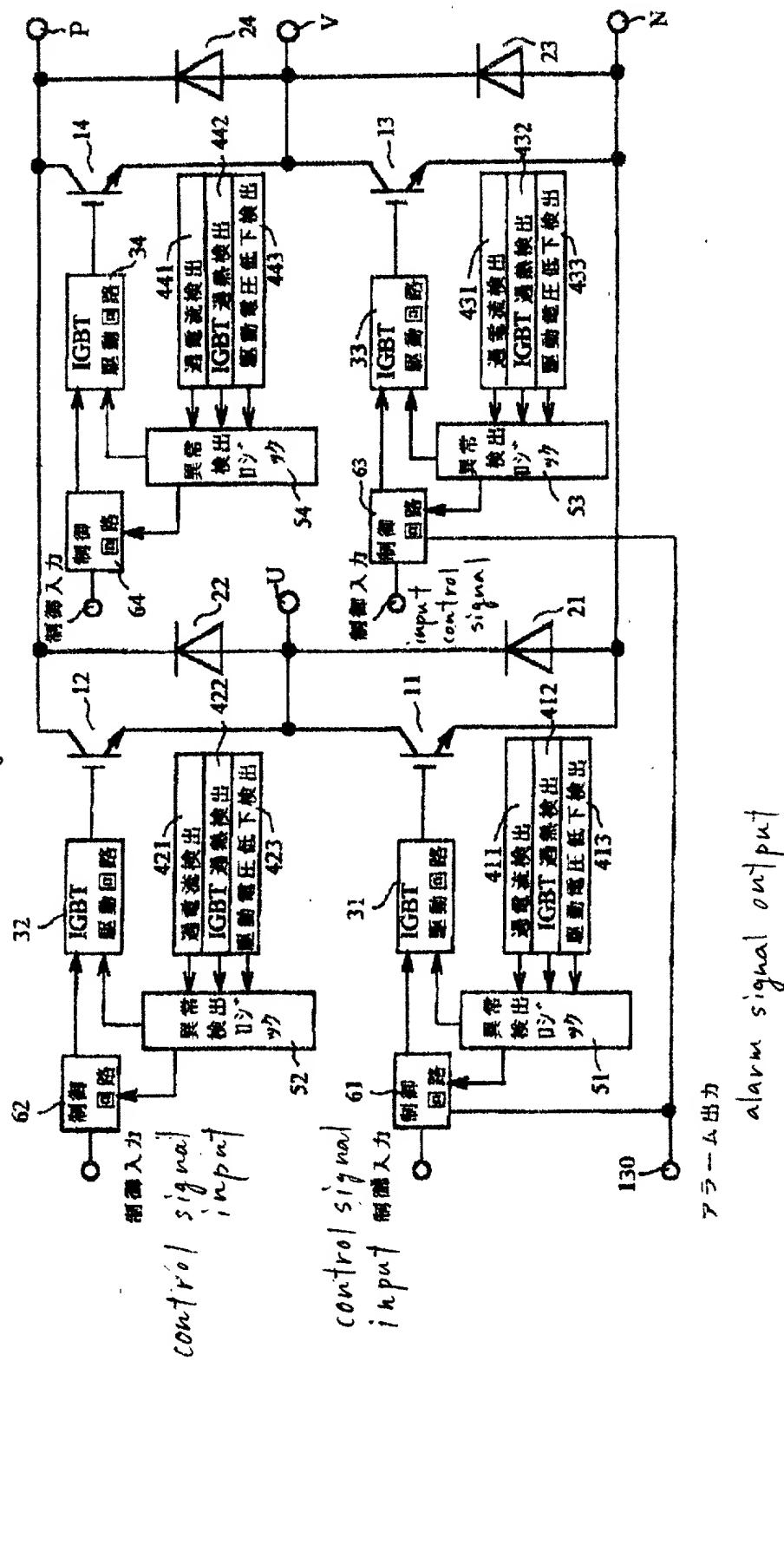
31, 32... IGBT drive circuit

411, 421... overcurrent detecting circuit

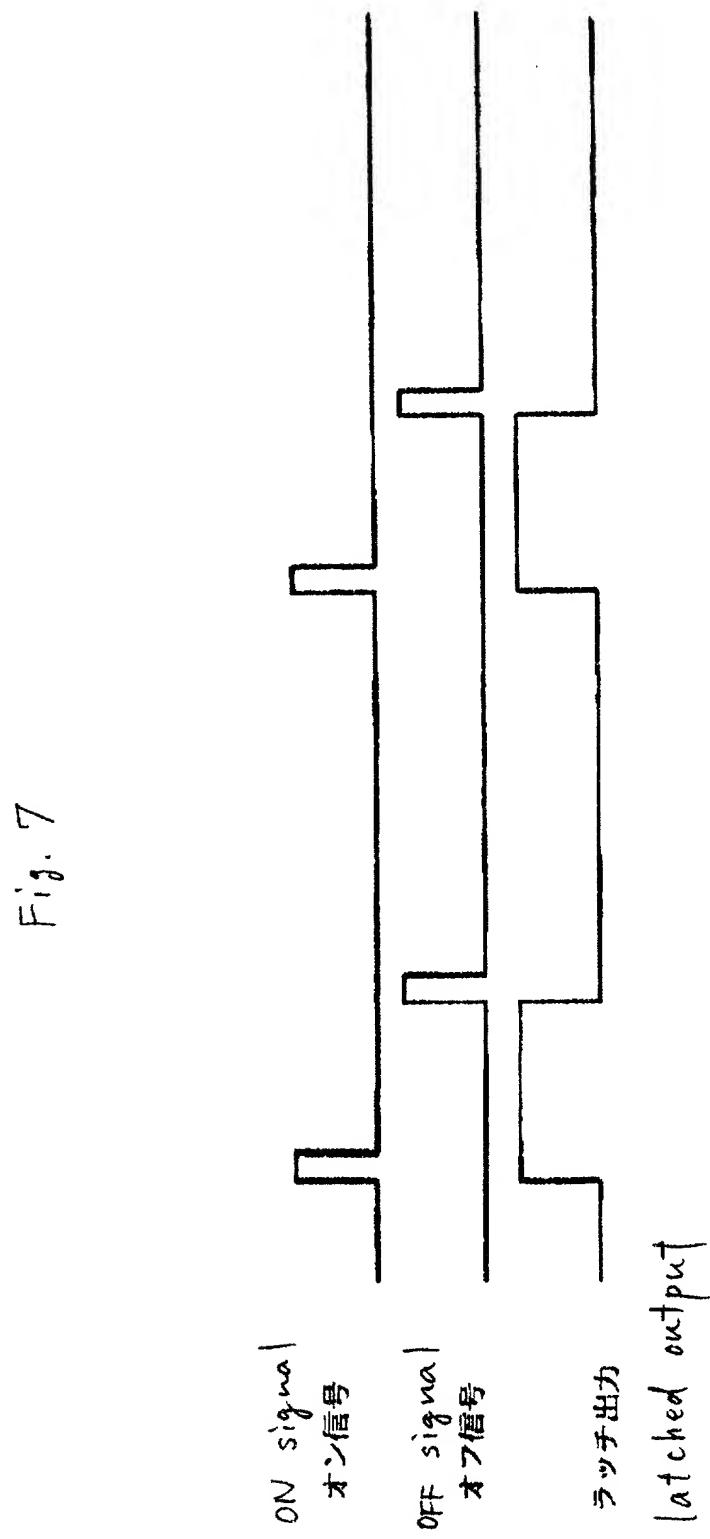
418, 428... IGBT overheat detecting circuit

417, 429... drive voltage drop detecting circuit

Fig. 6
【図 6】



【図 7】



【図 8】

Fig. 8

